Report Back on:

PUBLIC LAW CHAPTER 563

Provided By:

THE DEPARTMENT OF INLAND FISHERIES AND WILDLIFE

Prepared For:

THE JOINT STANDING COMMITTEE ON THE ENVIRONMENT AND NATURAL RESOURCES

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TITLE: "An Act to Prohibit Motorized Recreational Gold Prospecting in Class AA Waters and Certain Atlantic Salmon and Brook Trout Habitats"

SUBJECT: A report back to the Committee with a review of critical and high-value Brook Trout habitat.

Good afternoon Senator Saviello, Representative Welsh and honorable members of the Environmental and Natural Resources Committee. I am Bobby Van Riper, Fisheries Biologist at the Department of Inland Fisheries & Wildlife. I am here today to discuss the Department's review of critical and high-value Brook Trout habitat in response to Title 38 MRSA §480-Q, sub-§5-A, ¶G.

During the 126th Session of the Maine State Legislature, the Joint Standing Committee on Environment and Natural Resources considered L.D. 1671, "An Act to Prohibit Mechanized Gold Prospecting in Class AA Waters and Certain Atlantic Salmon and Brook Trout Habitats". §480-Q, Sub-§5-A, ¶G, sub-¶ (4) provides a list of Critical and High-value Brook Trout Habitats closed to mechanized prospecting.

Section 3 of PLC 536 requires the Maine Department of Inland Fisheries and Wildlife (MDIFW) to: "review data, conduct site visits and collect any additional information" to determine; 1)

whether the specific areas listed in sub-¶ (4) continue to represent critical and high-value habitat and, 2) to investigate other potentially critical or high-value habitat that should be closed to mechanized gold prospecting.

The following critical or high-value areas became closed to mechanized gold prospecting when PLC 536 passed:

- Bemis Stream and tributaries in Township D and Rangeley Plantation;
- Bond Brook in the City of Augusta and the Town of Manchester;
- Bull Branch of Sunday River and tributaries in Grafton Township and Riley Township;
- Carrabassett River and tributaries in the Town of Carrabassett Valley,
 Freeman Township, the Town of Kingfield, Mount Abram Township and Salem Township;
- Cold Stream tributaries, including Tomhegan Stream, in Chase Stream Township, Johnson Mountain Township and West Forks Plantation;
- Enchanted Stream in Upper Enchanted Township and Lower Enchanted Township;
- Magalloway River and tributaries, including Little Magalloway River, in Bowmantown Township, Lincoln Plantation, Lynchtown Township, Magalloway Plantation, Oxbow Township, Parkertown Township and Parmachenee Township;
- Rapid River in the Town of Upton and Township C;
- Sheepscot River and tributaries, including the West Branch, in the Town of Alna, the Town of China, the Town of Freedom, the Town of Liberty, the Town of Montville, the Town of Palermo, the Town of Somerville, the Town of Whitefield and the Town of Windsor;
- South Bog Stream in Rangeley Plantation;
- Spencer Stream and Little Spencer Stream tributaries, including Kibby
 Stream in Kibby Township, Skinner Township, T.3, R.5 B.K.P. W.K.R., T.4,
 R.5 B.K.P. W.K.R., King and Bartlett Township and T.5, R.6 B.K.P.
 W.K.R.; and
- Togus Stream in the Town of Chelsea and the Town of Randolph.

Waters listed below were evaluated by IFW staff as directed by Section 3 of PLC 536.

- 1. Sandy River and tributaries above Farmington Falls, including the minor civil divisions of Farmington, Strong, Avon, Phillips, Madrid, Township E, and Sandy River Plantation.
- 2. Sandy Stream and tributaries in Carrying Place (Town) Twp., Highland Plantation and Lexington Plantation.

- 3. Dead River and tributaries: a) above Flagstaff Lake and, b) between Grand Falls in T3 R4 BKP WKR and the Forks Plantation.
- 4. Kennebec River tributaries between Indian Pond Dam (Harris Station) in Chase Stream Township and Indian Stream Township and Williams Dam in the town of Solon.

Upper Sunday River above Riley Township\Newry town line (additional area not listed that represents critical or high-value brook trout habitat identified by MDIFW).

Results and Discussion

Fisheries biologists reviewed each of the waters listed in §480-Q, sub-§5A, ¶G, sub-¶ (4) and in Section 3 of the law using a consistent methodology. In the review, staff utilized existing data on file, historical and current evaluations, angler reports, and site visits.

Critical and\or high value brook trout habitat was defined as: 'The set of living and non-living resources present in an area accessible to brook trout that provide for continued survival and reproduction for successive generations of the species'. "Critical" habitat is that necessary to sustain the species; that is, necessary for it to survive long enough to generate successful offspring. The nature, composition and location of critical habitat for brook trout changes during the trout's life history and includes spawning areas, nursery habitat, foraging habitat, overwinter habitat, and refuge habitat, the latter including cold water inflows for thermal refuge during summer months and hiding places to avoid predators.

"High-value" habitat is critical habitat that has associated human values. The values may be economic, such as the financial returns from angling, or may involve human leisure activities in wild areas that serve as 'places to get away from it all. In the area of Western Maine where many of the streams on the closure list are located, the terminology of critical and high-value is synonymous. That is, the streams are high-value habitats because they possess critical habitat for brook trout and vice versa. Many are destination fisheries, drawing anglers from away for the opportunity to fish for wild trout in a remote wilderness setting. Often native brook trout are a non-existent species near their homes. This holds true for non-consumptive uses as well. The certainty is that we here in the State of Maine have a unique and valuable resource that results in both quality of place and as an important economic presence.

The primary criteria to determine continued inclusion on the list was a determination that the critical or high value brook trout habitat that originally qualified a particular water for listing, remained as such. Streams are dynamic habitats, and thus are constantly changing in terms of channel and riparian characteristics. Resident stream species possess life histories that allow them to survive natural variations in habitat. These natural changes were not considered as

habitat loss. Therefore, if there was no loss of habitat, the water received a recommendation to remain closed to mechanized prospecting. If there was habitat loss, it would need to be greater than 20% of the listed water to be significant. As noted above, stream habitats are dynamic. They are also resilient. Even if a large portion of instream habitat was lost or altered, communities of aquatic organisms generally regain diversity and population numbers per species in a relatively short period of time.

A similar process was used to evaluate waters as directed by Section 3. As part of the review, if high value brook trout habitat was found through data review, field evaluation or angler report, a recommendation was made to add it to the list.

The Maine Department of Inland Fisheries and Wildlife recommends reviewing the list at 5 year intervals to assure continued protection of the State's wild Brook Trout resource.

MIFW's Review/Recommendations for Waters Listed within PLC 536

- <u>Bemis Stream</u>: Primary brook trout spawning and nursery stream for, and is the source of brook trout for Bemis Stream and Mooselookmeguntic Lake. <u>Bemis Stream should remain on the list of waters closed to mechanized gold prospecting.</u>
- <u>Bond Brook</u>: Bond Brook was not reviewed by MDIFW. Inclusion on the closure list was recommended by Maine Department of Marine Resources (MDMR).
- <u>Bull Branch</u>: The Bull Branch is a large, very steep tributary to the Sunday River. Equal in discharge volume to the Sunday River, the Bull Branch drains the West slope of Old Speck Mountain, the S slope of Goose Eye Mountain and the E slope of Mahoosic Arm. It is a highly intact stream corridor, although with numerous natural barriers to fish movements. This may have resulted in the development of distinct populations of brook trout in both the main stream and in tributaries. Some of these isolated populations may be genetically unique. <u>Bull Branch should remain on the list of waters closed to mechanized gold prospecting.</u>
- <u>Carrabassett River and Tributaries:</u> The main stem of the Carrabassett River in the listed towns supports wild brook, but certain habitat features have been significantly degraded during the last decades. Hatchery stocks currently support much of the sport fishery in this area of the main stem. <u>MDIFW's recommendation is to remove the main stem of the Carrabassett River from the list of waters where mechanized gold prospecting is prohibited.</u>
- The South Branch of the Carrabassett River is class AA above 1.0 miles above the dam in the Town of Kingfield and is therefore closed to mechanized prospecting. The West Branch of the Carrabassett is Class AA above its confluence with Alder Stream in the Town of Kingfield is also closed to mechanized prospecting. Both of these river reaches provide excellent habitat for all life stage of wild brook trout and should remain closed to mechanized gold prospecting.

- Tributaries to the South Branch and West Branch provide excellent habitat in support of
 wild brook trout. MDIFW's recommendation is to keep all Class A tributaries upstream
 of the Class AA designation for both the South Branch and the West Branch closed to
 mechanized gold prospecting.
- <u>Cold Stream tributaries:</u> Cold Stream is a major tributary to the Kennebec River above
 the latter's confluence with the Dead River, and is currently classified AA and closed to
 mechanized gold prospecting. It is unique in that low water temperatures in relation to
 the Kennebec River provide thermal refuge for all life stages of brook trout resident to
 the main stem Kennebec below Harris Dam, and <u>MDIFW recommends that it remain</u>
 closed to mechanized gold prospecting.
- Tributaries to Cold Stream, including Tomhegan Stream, are very important habitat
 features for the entire Cold Stream watershed, and MDIFW recommends that they remain
 closed to mechanized gold prospecting.
- Enchanted Stream: Flows to the Dead River from two branches in Upper Enchanted Township. It possesses a very high quality brook trout population throughout its length, but the population is segregated by several natural drops. This may have resulted in the development of distinct populations of brook trout in both the main stream and in tributaries. Some of these isolated populations may be genetically unique. Lower Enchanted Pond, which the stream flows through, is classified as a State Heritage Brook Trout water. Enchanted Stream should remain on the list of waters closed to mechanized gold prospecting.
- Magalloway River: The Magalloway River is a trophy wild brook trout fishery. It flows from several branches in Bowmantown and Oxbow Townships through dammed Aziscohos Lake and into Umbagog Lake (the source of smallmouth bass invasion in the lower reach of the river). The Magalloway River in its entirety, and its tributaries, provides outstanding habitat for all life stages of wild brook trout and should remain on the list of waters closed to mechanized gold prospecting. The Little Magalloway River, a tributary that enters the river in the impoundment of Azischos Lake, should also remain closed to mechanized gold prospecting.
- <u>Rapid River:</u> The Rapid River is a world-renowned trophy wild brook trout fishery and is rated class AA. The fishery is under duress from invasive smallmouth bass. The MDIFW closely monitors both fish species and works with the operators of Middle Dam in pulsing discharge from the dam to minimize the production of smallmouth bass in the Rapid River in support of wild brook trout. <u>MDIFW recommends that the Rapid River</u> remain on the list of waters closed to mechanized gold prospecting.
- <u>Sheepscot River and tributaries:</u> The Sheepscot River and its tributaries were not reviewed by MDIFW. Inclusion on the closure list was recommended by MDMR.

- South Bog Stream: This stream is the most significant brook trout spawning and nursery tributary that supports Rangeley Lake's wild brook trout population. In recent years MDIFW and numerous partners have spent considerable time, energy and money to rehabilitate the lower stream corridor for brook trout production. Rangeley Lake is a destination fishery and has a widely known reputation for high quality fisheries. South Bog Stream should remain on the list of waters closed to mechanized gold prospecting.
- Spencer Stream and Little Spencer Stream tributaries including Kibby Stream: Kibby Stream and Spencer Stream drain the region of Northwestern Franklin and Western Somerset Counties, joining in King and Bartlett Township. Little Spencer Stream originates as the outlet of Spencer Lake in T3 R5 BKP WKR and joins Spencer Stream approximately two miles north of the confluence of Spencer Stream with the Dead River. Although there are natural barriers on Spencer Stream and Kibby Stream, both have large, high quality self-sustaining populations of wild brook trout throughout their respective sub-watersheds. Little Spencer Stream's wild brook trout population has likely been negatively impacted by the recent colonization of smallmouth bass. Spencer Stream and tributaries (except Little Spencer Stream) and Kibby Stream should remain on the list of waters closed to mechanized gold prospecting. Little Spencer Stream could be removed from the list of waters closed to mechanized gold prospecting.
- <u>Togus Stream</u>: Togus Stream was not reviewed by MDIFW. Inclusion on the closure list was recommended by MDMR.

2) Waters Evaluated per PLC 536

• Sandy River and tributaries above Farmington Falls: The Sandy River is Class AA from the outlet of the Sandy River Ponds to State Route 142 in Phillips. This uppermost reach of the Sandy River has some of the greatest promise to restore Atlantic salmon populations to the Kennebec River watershed, and MDMR conducts an active Atlantic salmon restoration program here, including in some tributaries. MDIFW recommends that the reach of the main stem Sandy River from the outlet of Sandy River Ponds to the Rt. 142 bridge in Phillips (currently Class AA) be retained on the list of waters closed to mechanized gold prospecting.

MDIFW reviewed 18 tributaries to the Sandy River above Farmington Falls and determined that 16 supported robust wild brook trout populations. The Orbeton\Perham Stream sub-watersheds also support a very unique population of wild, self-sustaining brown trout. The Committee may want to consider closing all tributaries that enter the Sandy River above the Rt. 142 Bridge in Phillips to motorized recreational gold prospecting, including the Orbeton/Perham Stream sub-watersheds.

Sandy Stream: Sandy Stream originates as the outlet of Middle Carry Pond in Carrying Place Town Township. Much of the upper watershed is relatively low gradient and has scattered populations of brook trout. Summer temperatures in the main course of the stream are lethal to trout, so the resident fish must locate thermal refugia to survive. As the stream crosses into Highland Plantation, gradient increases as does cold groundwater inputs, providing better habitat conditions for wild brook trout production; wild populations of brook trout are known to occur in Churchill and Stony Brooks. As Sandy Stream enters Lexington Township, its gradient changes from a steep mountain stream to a relatively flat valley stream. A major tributary, Michael Stream, enters as Sandy Stream enters the valley. Michael Stream collects numerous mountain streams, and both it and its tributaries support wild brook trout, but certain reaches of this part of the system have been degraded during the last decades, reducing its value as brook trout habitat. The remainder of Sandy Stream as it passes through Lexington Township is very flat gradient and contains very little habitat suitable for year-round habitation by Brook Trout. MDIFW recommends that Sandy Stream and tributaries not be included on the list of waters closed to mechanized gold prospecting.

Dead River and tributaries:

1. Above Flagstaff Lake:

South Branch: The South Branch of the Dead River originates as the outlet of Saddleback Lake. It has eight major tributaries from its source in Dallas Plantation downstream to Flagstaff Lake. While the upper reach of the South Branch is stocked by brook trout in the spring and fall, all of the major tributaries have wild brook trout populations in their upper reaches.

North Branch: The North Branch of the Dead River rises from the outlet of Lower Pond in Chain of Ponds Township. The river is stocked with Spring Yearling brook trout, but there has been an increase in wild populations of brook trout and landlocked salmon since a fishway was installed in the Dam at Lower Pond in 2009. There are eight major tributaries that enter the North Branch from Chain of Ponds Township to Eustis. All have wild brook trout in their upper reaches, and a mix of wild and stocked fish in the more downstream reaches.

Wild brook trout habitat in both the South and North Branches of the Dead River, including in some tributary streams, has been degraded during the past decades. Although wild brook trout do persist, particularly in tributary streams, <u>MDIFW</u> nonetheless recommends that these waters not be included in the list of waters closed to mechanized gold prospecting at this time.

2. From Grand Falls (T3 R34 BKP WKR) to The Forks Plantation:

The main stem of the Dead River arises from Long Falls Dam on Flagstaff Lake. It is approximately 8 miles from the dam to Grand Falls. Grand Falls is a popular angling site, with populations of wild and stocked brook trout, landlocked salmon,

and rainbow trout. MDIFW recommends that the main stem of the Dead River from Grand Falls to its confluence with the Kennebec River not be included on the list of waters closed to mechanized gold prospecting.

From T3 R4 BKP WKR, there are eight major tributaries. Two - Spencer Stream and Enchanted Stream - are currently on the list of waters closed to mechanized gold prospecting list, and MDIFW recommends that they be retained on the list. Five of the remaining six have documented populations of wild brook trout, but MDIFW lacks sufficient information on the dimensions of these populations and of their habitat to provide an informed recommendation for inclusion or exclusion to the list of waters closed to mechanized gold prospecting.

• <u>Kennebec River Tributaries:</u> From Indian Pond Dam (Harris Station) in Chase Stream and Indian Stream Townships to Solon

There are 26 major tributaries to the Kennebec River from Indian Pond Dam downstream to Williams Dam. One, Cold Stream is currently closed to mechanized gold prospecting, and MDIFW recommends that this closure be retained. Twenty other tributaries have documented populations of wild brook trout, but detailed population and habitat surveys have not yet been completed. Unique self-sustaining populations of rainbow trout exist in several tributaries to Austin Stream, including Gulf Stream, Chase Stream, and Mink Brook. MDIFW recommends that tributaries to the Kennebec River from Indian Pond to Williams Dam, except Cold Stream, not be included on the list of waters closed to mechanized gold prospecting.

• Sunday River: The upper Sunday River has been severely degraded by historic forest practices and yet still holds wild brook trout populations above the former town of Ketchum. Lower reaches are stocked with brook trout as a harvest opportunity fishery. Recent rehabilitation work in the form of removing a log driving dam has reconnected 6 miles of formerly fragmented stream habitat. In the near future, additional barrier removal efforts are planned as are the addition of large wood debris. The Committee may want to consider adding the upper Sunday River from its junction with Bull Branch (or from the Riley Township town line) upstream to its source to the list of waters closed to mechanized gold prospecting.